

fashion. Duration of hospital stay was also recorded for both the groups. Patients with in-hospital mortality were excluded.

Results: The 2 groups (23 patients in the ambrisentan group and 21 in the control group) were matched in age, sex distribution and baseline characteristics like tricuspid regurgitation (TR) grade, PA pressures, RV tei index and left ventricular ejection fraction (LVEF). Duration of hospital stay was significantly lower in the test group. (Mean 6.1 vs 7.6 days, $P=0.004$). At the time of discharge, reduction in PAH (Mean change 9.39 v/s 11.52, $p=0.663$) and RV tei index (Mean change 0.0017 v/s 0.0014, $p=0.989$) were not significantly different. However, at the end of 3 months, a significantly greater reduction in PAH (Mean change 28.91 v/s 13.7, $P=0.003$) and improvement in RV function as measured by Tei index (Mean change 0.038 v/s 0.007, $P=0.001$) was found in the ambrisentan group compared to the control group.

Conclusion: Ambrisentan seems to effectively reduce severe secondary PAH and hastens recovery of ventricular function in high risk surgical patients undergoing valve replacement surgery in the short term.

Cardio-Diabetes

Correlation of microalbuminuria with obesity and cardiovascular risk markers in Type II diabetic North Indian Punjabi population

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Background: Microalbuminuria has been identified as a predictor of renal failure and an independent risk factor for cardiovascular disease in patients with diabetes mellitus as well as in general population. This study was aimed to determine the correlation of microalbuminuria with obesity and cardiovascular risk markers.

Methods: 2044 Type II diabetes patients were enrolled in the study. Microalbuminuria in all the subjects was estimated and the albumin to creatinine ratio (A:C) determined. Obesity parameters (BMI, WHR), HbA1c, baPWV, Blood Pressure, ABI, LDL, HDL, and TG of all the subjects were also measured. baPWV was measured with VP-2000/1000-Colin Corporation, (hyayashi komaki Japan). Microalbuminuria was measured Clinitek status Analyzer. (Bayer Health Care).

Results: Overall prevalence of microalbuminuria was 58.4% (54.6% M/64.2%F). Microalbuminuria had a highly significant correlation with duration of diabetes ($p<0.001$), HbA1c and BMI ($p<0.05$), Systolic and diastolic blood pressure ($p<0.01$). Positive correlation was found with PWV, ABI, Cholesterol, LDL & TG.

Conclusions: The high proportion of type 2 diabetes patients with microalbuminuria raises implications for health policy in North India. Screening programs and optimized control of modifiable risk factors are needed to reduce the risk of diabetic nephropathy.

Early evaluation of coronary artery disease in asymptomatic Type 2 Diabetes Mellitus patients with TMT and CAG

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Background: Type 2 Diabetes Mellitus is a major risk factor for Coronary Artery Disease (CAD). Patients remain mostly asymptomatic and thus diagnosed at an advance stage of the disease. Our aim of study was to detect the coronary artery disease at an early stage in asymptomatic patients.

Methods: 136 asymptomatic of Type 2 diabetes mellitus patients were enrolled prospectively for TMT and subsequent coronary angiography was performed on 96 (70.58%) TMT positive patients. Diabetic status, clinical parameters including risk factors, TMT and angiographic findings were analyzed.

Results: CAG was performed in all TMT positive patients. CAD was positive in 30 patients (45.45%) of high risk group (risk factors >2) with multiple vessel involvement and 6 patients (20%) with single vessel disease with low risk group (risk factors >1). Duration of Diabetes Mellitus and multiple risk factors were correlated with the severity as well as multiple coronary artery involvement.

Conclusions: A routine TMT of all long standing Type 2 diabetic patients (duration >10 years) and subsequent CAG should be done for early detection of CAD to take early appropriate revascularization measure.

A cross sectional study to find the association between prolonged QTc interval and microalbuminuria in patients of type 2 diabetes

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Background: The link between microalbuminuria and premature death in type 2 diabetes is not completely explained by conventional cardiovascular risk factors. Cardiac autonomic neuropathy (CAN) can be detected in at least one third of type 2 diabetic patients. CAN is associated with a high mortality which is attributed not only to sudden death but also to diabetic nephropathy. Prolonged QTc interval is found to be a specific indicator for CAN. The present study was undertaken to find the association between prolonged QTc interval and microalbuminuria in type 2 diabetes patients.

Methods: The present one year cross-sectional study was conducted on 86 (43 with normoalbuminuria and 43 with microalbuminuria) patients with type 2 DM during the period of January 2009 to December 2009. Urine albumin excretion test (Microalbumin to creatinine ratio) was done. Electrocardiogram was done to calculate the QTc interval. QTc interval was calculated using Bazett's formula.

Results: In the present study, 60.47% and 69.77% were males in normoalbuminuric and microalbuminuric groups respectively. The mean age in normoalbuminuric group was 54.51 ± 10.15 years and it was 55.93 ± 11.73 years in microalbuminuric group. Most of subjects had duration of diabetes less than 10 years (44.19% in normoalbuminuric and 34.88% in microalbuminuric groups respectively). QTc interval was significantly prolonged in 25.58% of patients in normoalbuminuric and 69.77% in microalbuminuric group ($p = 0.001$). Mean QTc interval was significantly more (454.73 ± 29.33 ms) in microalbuminuric group compared to normoalbuminuric group (418.13 ± 27.44 ms) ($p = 0.001$). Mean duration of diabetes was less (14.93 ± 3.81 years) in microalbuminuric group compared to (16.00 ± 4.87 years) normoalbuminuric group. **Conclusions:** The study showed that, prevalence of CAN as diagnosed by prolonged QTc interval was more in Type 2 DM patients with microalbuminuria and type 2 diabetic patients with microalbuminuria can develop CAN with short duration of diabetes.